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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,926	11/04/2003	Martin Bleicher	21334-1276	5846

7590 11/08/2004  
Barley, Snyder, Senft & Cohen, LLC  
126 East King Steet  
Lancaster, PA 17602-2893

EXAMINER
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TA, THO DAC

ART UNIT	PAPER NUMBER
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2833

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Office Action Summary</b></p>	<p><b>Application No.</b></p> <p>10/700,926</p>	<p><b>Applicant(s)</b></p> <p>BLEICHER, MARTIN</p>	
	<p><b>Examiner</b></p> <p>Tho D. Ta</p>	<p><b>Art Unit</b></p> <p>2833</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/3/04</u> .  | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation " the grooves are formed on the inner surface of the openings " in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "receiving element grooves are inclined and having a teardrop shape" must be shown or the feature(s) canceled from the claim(s) (claims 23-25). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

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changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5, 10-13, 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Anselmo et al. (4,381,134).

In regard to claim 1, Anselmo et al. discloses a plug connection device 20, comprising: contact pin having an outer surface; a receiving element 11 having openings 13, each of the openings 13 having an inner surface that contacts the outer surface of the contact pin when the contact pin is received therein; and the plug connection device having grooves 32, 33 extending a radial direction wherein a distance between adjacent grooves 32, 33 is smaller than a distance between adjacent openings 13.

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In regard to claim 2, Anselmo et al. discloses that the receiving element 11 is made from a non-conductive material (column 3, line 47) and the contact pin is made from a conductive material.

In regard to claim 3, Anselmo et al. discloses that the grooves 32, 33 extend transversely to a mating direction of the contact pin.

In regard to claim 4, Anselmo et al. discloses that machining marks are removed in an area of the grooves 32, 33 after the grooves are formed.

In regard to claim 5, Anselmo et al. discloses that the grooves 32, 33 extend further in a radial direction than in a longitudinal direction.

In regard to claim 10, Anselmo et al. discloses contact pins 20 for a plug connection device, each of the contact pins 20 comprising: an outer surface with contact pin grooves 32, 33 extending in a radial direction, wherein a distance between adjacent contact pin grooves 32, 33 is smaller than a distance between adjacent contact pins 20.

In regard to claim 11, Anselmo et al. discloses that the grooves 32, 33 extend transversely to a mating direction of the contact pin 10.

In regard to claim 12, Anselmo et al. discloses that machining marks are removed in an area of the grooves 32, 33 after the grooves are formed.

In regard to claim 13, Anselmo et al. discloses that the contact pins 10 are formed from a drawn metal wire.

In regard to claim 17, Anselmo et al. discloses that the grooves 32, 33 extend further in a radial direction than in a longitudinal direction.

6. Claims 1, 6-8, 10, 14-16, 18, 19, 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Stauffer (3,897,131).

In regard to claim 1, Stauffer discloses a plug connection device 6, comprising: contact pin having an outer surface; a receiving element 8 having openings 22, each of the openings 22 having an inner surface that contacts the outer surface of the contact pin when the contact pin is received therein; and the plug connection device 6 having grooves (adjacent 34) extending a radial direction wherein a distance between adjacent grooves is smaller than a distance between adjacent openings 22.

In regard to claim 6, Stauffer discloses that the grooves are inclined with respect to a longitudinal direction.

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In regard to claim 7, Stauffer discloses that the grooves are inclined by about degrees.

In regard to claim 8, Stauffer discloses that the grooves have a teardrop shape.

In regard to claim 10, Stauffer discloses contact pins for a plug connection device 6, each of the contact pins comprising: an outer surface with contact pin grooves (adjacent 34) extending in a radial direction, wherein a distance between adjacent contact pin grooves is smaller than a distance between adjacent contact pins.

In regard to claim 14, Stauffer discloses that the grooves are inclined with respect to a longitudinal direction of the contact pin .

In regard to claim 15, Stauffer discloses that the grooves are inclined by about 45 degrees.

In regard to claim 16, Stauffer discloses that the grooves have a teardrop shape.

In regard to claim 18, Stauffer discloses a receiving element 8 for a plug connection device 6, comprising: openings 22 with an inner surface, the inner surface

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having receiving element grooves 24, 28 extending in a radial direction, wherein a distance between adjacent receiving element grooves 24, 28 is smaller than a distance between adjacent openings 22.

In regard to claim 19, Stauffer discloses that the receiving element 8 is made from a non-conductive material.

In regard to claim 25, Stauffer discloses that the receiving element grooves 24, 28 have a teardrop shape.

7. Claims 1, 9, 18, 20-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Hild et al. (4,021,094).

In regard to claim 1, Hild et al. discloses a plug connection device 23, comprising: contact pin 22 having an outer surface; a receiving element 15 having openings 21, each of the openings 21 having an inner surface that contacts the outer surface of the contact pin 22 when the contact pin 22 is received therein; and the plug connection device 23 having grooves (threaded portion of 22) extending a radial direction wherein a distance between adjacent grooves is smaller than a distance between adjacent openings 21.



In regard to claim 9, Hild et al. discloses that the grooves are formed on the inner surface of the openings 21 of the receiving element 15 and the outer surface of the contact pins 22.

In regard to claim 18, Hild et al. discloses a receiving element 15 for a plug connection device 23, comprising: openings 21 with an inner surface, the inner surface having receiving element grooves (threaded portion) extending in a radial direction, wherein a distance between adjacent receiving element grooves is smaller than a distance between adjacent openings 21.

In regard to claim 20, Hild et al. discloses that the receiving element grooves extend transversely to a mating direction of a contact pin 22.

In regard to claim 21, Hild et al. discloses that machining marks are removed in an area of the receiving element grooves (after the threads are formed).

In regard to claim 22, Hild et al. discloses that the receiving element grooves extend further in a radial direction than a longitudinal direction.

In regard to claim 23, Hild et al. discloses the receiving element grooves are inclined (due to the structure of threads) with respect to a longitudinal direction of the opening 21.

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In regard to claim 24, Hild et al. discloses that the receiving element grooves are inclined (due to the structure of threads) by about 45 degrees.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho D. Ta whose telephone number is (571) 272-2014. The examiner can normally be reached on M-F (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 ext 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**THO D. TA  
PRIMARY EXAMINER**

tdt  
11/04/04